

# Data Acquisition Unit DAU 2100

## BENEFITS

- Up to 14 PT 100 temperature inputs.
- Level, ullage, spot & average temperature field-display and analog input.
- Excellent readability
- Easy to install and use
- Robust, weather/dirt protection
- Intrinsically safe



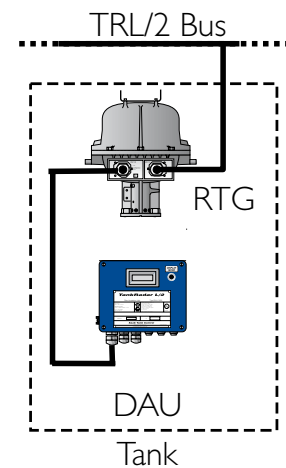
The Data Acquisition Unit (DAU 2100) is a local readout/connection unit for use with the TankRadar Rex tank gauging system. The DAU 2100 is used for connection of temperature sensors when more inputs/outputs are required than is available in the Rex Gauge. Its rugged design withstands many years of outdoor use under harsh environmental conditions.

## Connection options

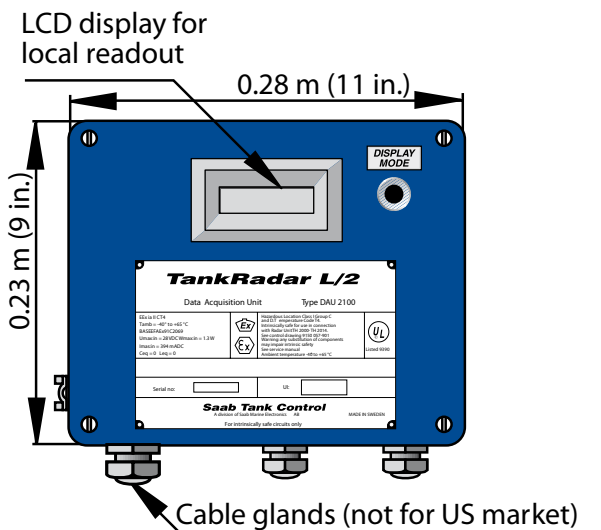
A Multiple Spot Thermometer (MST) with up to 14 temperature elements can be connected to the DAU. The DAU is powered from, and communicates through the Rex Gauge to which it is connected. The DAU is intrinsically safe using zener barriers on the Transmitter Interface Card (TIC) in the Rex Gauge. The weatherproof unit houses a printed circuit board with a cable terminal for connection of the temperature sensors, as well as the power and communication cable to the Rex Gauge. Cable inlet glands are located at the bottom of the unit.

## Local Readout

The DAU can be equipped with a Readout Display showing level, temperature and other measured values. With the DAU placed at the foot of the tank, these values can be viewed without having to climb to the tank top. The DAU can also be placed at the tank top.



DAU connection to TRL/2 Bus.



DAU with Local Readout display mounted at the foot of the tank.

Specification	
<b>Ambient operating temp:</b>	-40° C to +70° C (-40° F to +158° F)
<b>Number of sensor elements:</b>	Max. 14 per DAU
<b>Sensor elements:</b>	Pt 100 single or multispot
<b>Display (optional):</b>	LCD with 6 digits
<b>Available data on display:</b>	Level, Ullage, Spot temperature, Average temperature, Analog Input from RTG
<b>Ingress protection:</b>	IP 66 & 67
<b>Temperature resolution:</b>	0.1° C (0.18° F)
<b>Temperature ranges:</b>	Range 1: -50° C to 125° C (-58° F to 257° F) Range 2: -50° C to 300° C (-58° F to 572° F) Range 3: -200° C to 150° C (-330° F to 302° F) Note! Temperature range for PTB approval is -20° C to +90° C (-4° F to + 194° F)
<b>Power supply:</b>	Intrinsically safe supply from Rex Gauge.
<b>Field bus:</b>	Intrinsically safe local line from the Rex Gauge.
<b>Hazardous locations certifications:</b>	ATEX: $\text{C} \text{E} 0575 \text{Ex} \text{II} 1 \text{G EEx ia IIB T4}$ UL: Class I, Div I, Groups C and D
<b>Accuracy (excl. sensor):</b>	$\pm 0.2^{\circ} \text{C} (\pm 0.36^{\circ} \text{F})$ [for -20° C to 100° C (-4° F to 212° F)] $\pm 0.5^{\circ} \text{C} (\pm 0.9^{\circ} \text{F})$ [for other ranges] PTB legal metrology approval

Technical details are subject to change without prior notice. For more technical details, see the Rex Technical Description.